

[Federal Register: July 15, 1994]

DEPARTMENT OF **ENERGY**

Office of **Energy** Efficiency and Renewable **Energy**

[Docket No. EE-RM-94-210]

Building **Energy** Standards Program: Updating State Building Codes
Regarding **Energy** Efficiency

AGENCY: Office of **Energy** Efficiency and Renewable **Energy**, Department of **Energy** (DOE).

ACTION: Notice.

SUMMARY: Pursuant to section 304 of the **Energy** Conservation and Production Act, the Department of **Energy** (DOE or Department) is announcing guidance and procedures for the use of States concerning their review of the **energy**-related provisions of their residential building codes in light of the relevant version of the Council of American Building Officials' **Model Energy Code (Model Energy Code)**, and of their commercial building codes in light of the American Society of Heating, Refrigerating and Air Conditioning Engineers/Illuminating Engineering Society of North America Standard 90.1-1989 (Standard 90.1-1989). The guidance and procedures cover Certifications, Statements of Reasons and Requests for Extensions of Deadlines from States pursuant to section 304.

In addition, the Department today determines that the **Model Energy Code**, 1993 compared to the **Model Energy Code**, 1992 would achieve greater **energy** efficiency in residential buildings. Consequently, States should review their residential building codes during the next two years using the **Model Energy Code**, 1993 as the standard.

DATES: Certifications or Statements of Reasons with regard to **Model Energy Code**, 1992 are due October 24, 1994. Certifications or Statements of Reasons with regard to **Model Energy Code**, 1993 are due two years from the publication of this notice. Certifications with regard to Standard 90.1-1989 are due October 24, 1994.

ADDRESSES: Certifications, Statements of Reasons, and Requests for Extensions of Deadlines for Certification Statements by States should be directed to the Assistant Secretary for **Energy** Efficiency and Renewable **Energy**, Office of Codes and Standards, Mail Station EE-43, 1000 Independence Avenue, Washington, DC 20585. Envelopes or packages should be labeled, ``State Certification of Building Codes Regarding **Energy** Efficiency.''

FOR FURTHER INFORMATION CONTACT: Stephen P. Walder, U.S. Department of **Energy**, Office of **Energy** Efficiency and Renewable **Energy**, Forrestal Building, Mail Station EE-432, 1000 Independence Avenue, SW., Washington, DC 20585, Phone: 202-586-9209, FAX: 202-586-4617.

SUPPLEMENTARY INFORMATION:

I. Introduction

A. Statutory Requirements

Title III of the **Energy** Conservation and Production Act of 1976, as amended (Act) establishes mandated requirements for the Building **Energy** Standards Program. 42 U.S.C. 6831-6837. The Act applies to all State building codes which by definition includes the codes of units of general purpose local government. 42 U.S.C. 6832. As stated in the Act, the term ``State'' is defined to include the District of Columbia, the Commonwealth of Puerto Rico, any territory and possession of the United States, as well as the 50 States.

1. Residential Building Codes. Under the Act, each State, not later than two years after the enactment of the **Energy** Policy Act of 1992 (October 24, 1992), is required to certify to the Secretary of **Energy** (Secretary) that it has reviewed the provisions of its residential building **code** regarding **energy** efficiency and made a determination as to whether it is appropriate for such State to revise its residential building **code** provisions to meet or exceed the **Model Energy Code**, 1992 or any successor of such **code** that improves **energy** efficiency. The determination is to be: (1) made after public notice and hearing; (2) made in writing; (3) based on findings included in such determination and evidence presented at the hearing; and (4) available to the public. 42 U.S.C. 6833(a)(1), (a)(2). In addition, if a State makes a determination that it is not appropriate to revise its residential building **code**, the State is required to submit to the Secretary, in writing, the reasons for the determination which is to be made available to the public. 42 U.S.C. 6833(a)(4).

Furthermore, whenever the **Model Energy Code**, 1992, or any successor to such **code** is revised, the Secretary is required to make a determination, not later than 12 months after such revision, whether such amendment would improve the **energy** efficiency of residential buildings and to publish notice of such determination in the Federal Register. If the Secretary determines that the revision of **Model Energy Code**, 1992, or any successor thereof, improves the **energy** efficiency in residential buildings, then not later than two years after the date of the publication of such determination, each State is required to certify that it has reviewed the provisions of its residential building **code** regarding **energy** efficiency and made a determination as to whether it is appropriate for the State to revise its residential building **code**. 42 U.S.C. 6833(a)(5).

As of the date that this notice was issued, only one State had submitted a certification with regard to the **Model Energy Code**, 1992.

2. Commercial Building Codes. Under the Act, each State, not later than two years after enactment of the **Energy** Policy Act of 1992, is required to certify to the Secretary that it has reviewed and updated the provisions of its commercial building **code** regarding **energy** efficiency. The certification must include a demonstration that the State's **code** provisions meet or exceed the requirements of Standard 90.1-1989. Whenever the provisions of Standard 90.1-1989, or any successor standard, are revised, the Secretary is required to make a determination, not later than 12 months after the date of such revision, whether such amendment would improve **energy** efficiency in commercial buildings and to publish notice of such determination in the Federal Register. 42 U.S.C. 6833(b)(1) and (b)(2). If the Secretary publishes an affirmative determination, then the States have up to 2 years to review and update their commercial building codes accordingly. Id.

3. Requests for Extension of Deadlines. The Act authorizes the Secretary to permit extensions of the deadlines for the certification requirements relative to both residential and commercial building

codes, if the State can demonstrate that it has made a good faith effort to comply with the requirements and that it has made significant progress in doing so. 42 U.S.C. 6833(c).

II. Discussion

A. Updating Residential Building Codes Regarding **Energy** Efficiency

1. Determination. As stated above, section 304(a)(2) requires each State to make a determination as to whether it is appropriate for such State to revise its residential building **code** regarding **energy** efficiency. The determination shall be: (1) made after public notice and hearing; (2) in writing; (3) based upon findings and upon the evidence presented at the hearing; and (4) made available to the public. The States have considerable discretion with regard to the hearing procedures they use, subject to providing an adequate opportunity for members of the public to be heard and to present relevant information. The Department recommends publication of any notice of public hearing in newspapers of general circulation.

The Department realizes that some States do not have a State residential **code** or have a **code** that does not apply to all newly constructed residential buildings. If local building codes regulate residential building design and construction rather than a State **code**, the State must provide for review of those local codes and determine whether it is appropriate for each of its units of general purpose local government to revise the provisions of its residential building **code** regarding **energy** efficiency to meet or exceed the **Model Energy Code**. States may base their determinations and certifications on reasonable preliminary determinations by units of general purpose local government after they have held an adequate public hearing.

States should be aware that high-rise multi-family residential buildings (greater than three stories) and hotel, motel, and other transient residential building types of any height have historically been treated for **energy code** purposes as commercial buildings. Consistent with the treatment of high-rise multi-family residential buildings and hotels, motels, and other transient residential building types in Standard 90.1-1989 as if they were commercial buildings, the Department is of the view that the **energy** efficiency requirements of building codes applicable to such buildings should be reviewed and updated by the States and units of general purpose local government pursuant to the Act as if they were commercial building **code** requirements. Consequently, residential buildings, for the purposes of certification, would include one- and two-family detached and attached buildings, townhouses, row houses, and low-rise multi-family buildings (not greater than three stories) such as condominiums and garden apartments.

2. Certification. As stated above, section 304(a) requires each State to certify to the Secretary that it has reviewed the provisions of its residential building **code** regarding **energy** efficiency and made a determination as to whether it is appropriate for such State to revise the provisions of such residential building **code** to meet or exceed the **Model Energy Code**, 1992. The certification must be in writing. If a State intends to certify that its residential building **code(s)** already meet or exceed the requirements of the **Model Energy code**, 1992, it would be appropriate for the State to provide an explanation of the basis for this certification, e.g. the **Model Energy Code**, 1993, is incorporated by reference, the results of the Departments' comparative analysis or the results of an independent analysis. The Department believes that it would be appropriate for the chief executive of the State (e.g., the Governor) to designate a State official such as the

Director of the State **energy** office, State **code** commission, utility commission, or equivalent having primary responsibility for residential building **code** promulgation and adoption to provide the certification to the Secretary, including certifications regarding the codes of units of general purpose local government based on information provided by responsible local officials.

3. Statement of reasons. Section 304(a)(4) requires that if a State makes a determination that it is not appropriate to revise the **energy** efficiency provisions of its residential building **code**, the State is to submit to the Secretary, in writing, the reasons for this determination. The statement of reasons should define and summarize the pertinent issues and problems regarding its determination; and provide an explanation as to why the State came to its conclusion. If local building codes are applicable in the absence of a State **code**, the State may rely on reasons provided by the units of general purpose local government. Upon receipt, the Department will publish in the Federal Register a notice of availability, stating that a copy has been placed in its Freedom of Information Reading Room in the Forrestal Building in Washington, D.C., so that members of the public may inspect it.

4. DOE Determination of Improved **Energy** Efficiency from a Revised **Model Energy Code**. At the beginning of 1993, the Council of American Building Officials published a new edition of the **Model Energy Code**. Differences between the two versions include: (1) the 1993 Edition incorporates the heating, ventilation, and air conditioning minimum **energy** efficiency standards requirements from Standard 90.1-1989 which includes the Department's appliance **energy** conservation regulations. 10 CFR Part 430. (2) the 1993 Edition incorporates revised U<INF>o\1\ values for walls; (3) the 1993 Edition includes revised air infiltration values for windows and doors; and (4) the 1993 Edition incorporated the air leakage requirements of Standard 90.1-1989.

 \1\U<INF>o = the area-weighted average thermal transmittance of the gross area of the building envelope; i.e., the exterior wall assembly including fenestration and doors, the roof and ceiling assembly, and the floor assembly, British thermal unit/(hour x square feet x degrees Fahrenheit).

Based on the above, the Department has determined that the 1993 update would improve the **energy** efficiency of residential building codes. Section 304(a)(5) of the Act provides for States to certify their codes [using the procedures in section 304(a)(2)] after reviewing them in light of a revised version of the **Model Energy Code**, such as the 1993 update, not later than two years from the Department's determination that the revised version would improve **energy** efficiency. With regard to the **Model Energy Code**, 1993, that period for revision begins today.

As noted above, only one State has submitted a certification with regard to its residential building **code** as of the date that this notice was issued. States that have not yet made substantial progress in reviewing the **energy** efficiency provisions of their residential building codes may wish to review and certify their codes in light of the **Model Energy Code**, 1993. If a State is able to complete its review and certification with regard to the **Model Energy Code**, 1993 on or before October 24, 1994, there is no need to separately review and certify with respect to the **Model Energy Code**, 1992. States that have made substantial progress in reviewing the **energy** efficiency provisions of their residential building codes in light of the **Model Energy Code**, 1992 may wish to complete their review and submit an appropriate

certification by the October 24, 1994 statutory deadline before considering the **Model Energy Code**, 1993.

B. State Certification and Demonstration Regarding Updating of Commercial Building Codes

1. Certification. Section 304(b) requires that not later than October 24, 1994 each State shall certify in writing to the Secretary that it has reviewed and updated the provisions of its commercial building **code** regarding **energy** efficiency. The certification is required to include a demonstration that the commercial building **code** provisions regarding **energy** efficiency meet or exceed the requirements of Standard 90.1-1989. As discussed in section A herein, commercial buildings include hotels, motels and other transient buildings of any height as well as high-rise (greater than three stories) multi-family residential buildings (such as apartments and condominiums).

The Department believes that it would be appropriate for the chief executive of the State (e.g., the Governor) to designate a State official such as the Director of the State **energy** office, State **code** commission, utility commission or equivalent having primary responsibility for commercial building **code** promulgation and adoption to provide the certification to the Secretary. The Department realizes that some States do not have a State commercial **code** or have a **code** that does not apply to all newly constructed commercial buildings. Where local building codes regulate commercial building design and construction rather than a State **code**, the State must provide for the review and updating of those codes regarding **energy** efficiency to meet or exceed Standard 90.1-1989. With respect to local building codes, States may base their review and update on reasonable preliminary review and certifications presented to the State by its units of general purpose local government.

2. Demonstration. It would be appropriate for the demonstration to include a copy of the State and local government (if applicable) commercial building codes regarding **energy** efficiency or copies of legislation or regulations adopting either Standard 90.1-1989, or the codified version of Standard 90.1-1989, by reference or incorporation into its State or local building codes. If a State has not adopted Standard 90.1-1989 by reference or incorporation, it would be appropriate to include an analysis showing that its **code** meets or exceeds Standard 90.1-1989, or the State could accept the conclusions provided the State by the Department in its comparative analysis of the State **code** relative to Standard 90.1-1989 as a part of the technical assistance provided under section 304(d). In conjunction with the effort to update its residential building **code**, States should be aware that the **Model Energy Code**, 1993 adopts Standard 90.1-1989 by reference for commercial and high-rise residential buildings. As such, State adoption of the **Model Energy Code**, 1993 would automatically satisfy the Act as it relates to commercial buildings.

Demonstrations for local government building codes may be based on reasonable preliminary review and analyses presented to the State by its units of general purpose local government.

C. Request for Extensions

Section 304(c) of the Act requires that the Secretary permit extensions of the deadlines for the certification requirements under sections 304(a) and (b) if a State can demonstrate that it has made a good faith effort to comply with such requirements and that it has made significant progress toward meeting the provisions of section 304. Such demonstrations could include one or more of the following: (1) a plan

for response to the requirements stated in section 304; (2) a statement that the State has appropriated or requested funds (within State funding procedures) to implement a plan that would respond to the requirements of section 304; or (3) a notice of public hearing.

States should submit separate requests for extension of deadlines for their residential and the commercial building **code** certifications.

D. Submittals

When submitting any of the above-described documents in this notice, the Department requests that the original documents be accompanied by one copy of the same.

Issued in Washington, DC, on June 7, 1994.

Christine A. Ervin,

Assistant Secretary, **Energy** Efficiency and Renewable **Energy**.

[FR Doc. 94-17259 Filed 7-14-94; 8:45 am]

BILLING **CODE** 6450-01-P